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SHAW PITTMAN			OUELLETTE, JONATHAN P	
IP GROUP 1650 TYSONS BOULEVARD			ART UNIT	PAPER NUMBER
SUITE 1300			3629	
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Summany	09/987,643	SEIBERT, ROY E.				
Office Action Summary	Examiner	Art Unit				
	Jonathan Ouellette	3629				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
 Responsive to communication(s) filed on 15 November 2001. This action is FINAL. 2b) ☐ This action is non-final. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. 						
Disposition of Claims						
4) ☐ Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-20 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.					
Application Papers						
 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. 						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in Application ity documents have been receive I (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:					

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DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-3 and 8-10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.
- 3. As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof."

 Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an

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invention is eligible for a patent is to determine if the invention is within the "technological arts".

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- 4. Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPO2d (BNA) 1596 (Fed. Cir. 1998).
- 5. This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

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6. In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

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7. The decision in State Street Bank & Trust Co. v. Signature Financial Group, Inc. never addressed this prong of the test. In State Street Bank & Trust Co., the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See State Street Bank & Trust Co. at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §\$102, 103 and 112." See State Street Bank & Trust Co. at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, State Street abolished the Freeman-Walter-Abele test used in Toma. However, State Street never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under

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the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

- 8. Claims 1-3 and 8-10 appear to be describing a method provides reminders to users, wherein the user contacts the service and requests a reminder for service. Thus, this process does not include a distinguishable apparatus, computer implementation, or any other incorporated technology, and would appear to be an attempt to patent an abstract idea not a "tangible" process and, therefore, non-statutory subject matter.
- 9. As to technological arts recited in the preamble, mere recitation in the preamble (i.e., intended or field of use) or mere implication of employing a machine or article of manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble.
- 10. Mere intended or nominal use of a component, albeit within the technological arts, does not confer statutory subject matter to an otherwise abstract idea if the component does not apply, involve, use, or advance the underlying process.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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12. <u>Claims 11-14 and 17-19</u> are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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13. Claim 11-14 and 17-19 recite the limitation "the system" in the method claim 8. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- 15. Claims 1, 2, 4-9, and 11-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Hughes (Hughes, Arthur Middleton, "Friendly reminder: 3M is boosting sales and promoting clean air with a retention program for its Filtrete filters." Direct, v9, n11, p39(2), September 1, 1997).
- 16. As per independent Claim 1, Hughes discloses a system for notifying customers comprising: means for receiving filter information from a customer (user registration); means for computing a filter replacement data; means for sending a message (reminder letter) to a customer on message date that is related to the filter replacement date (Hughes, Arthur Middleton, "Friendly reminder: 3M is boosting sales and promoting

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clean air – with a retention program for its Filtrete filters." Direct, v9, n11, p39(2), September 1, 1997).

- 17. As per Claim 2, Hughes discloses wherein the message date is before the filter replacement date.
- 18. As per Claim 4, Hughes discloses wherein previous interactions with the customer is stored as historical information (marketing database).
- 19. As per Claim 5, Hughes discloses wherein historical information is considered in computing the filter replacement date.
- 20. As per Claim 6, Hughes discloses wherein the first filter replacement date and the second filter replacement date define a first filter replacement interval and wherein a third filter replacement date and a forth replacement date define a second filter replacement interval, and wherein the first replacement interval is different from the second replacement interval (operational consistency— has no impact on system service).
- 21. As per Claim 7, Hughes discloses wherein the second filter replacement date is the same as the third replacement date.
- 22. As per **independent Claim 8**, Hughes discloses a method for notifying customer comprising the steps of: receiving, from a customer, information related to a filter (user registration), using the information to computer a replacement time for the filter; and providing a contact (reminder letter) with the customer at the replacement time (Hughes, Arthur Middleton, "Friendly reminder: 3M is boosting sales and promoting clean air with a retention program for its Filtrete filters." Direct, v9, n11, p39(2), September 1, 1997).

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23. As per Claim 9, Hughes discloses wherein the contact is an information related to the filter and a reminder to replace the filter.

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- 24. As per Claim 11, Hughes discloses wherein the contact is a message and wherein the system waits for a response after sending the message.
- 25. As per Claim 12, Hughes discloses wherein while the system is waiting, the system is adapted to receive information from the customer (additional registration) and after receiving the information, sends a product to the customer (rebate/coupon offers).
- 26. As per Claim 13, Hughes discloses wherein the system sends the product to the customer by sending a command to a fulfillment location (shipping department).
- 27. As per Claim 14, Hughes discloses wherein the system sends the product by shipping the product.
- 28. As per Claim 15, Hughes discloses wherein previous interactions with the customer is stored as historical information (marketing database).
- 29. As per Claim 16, Hughes discloses wherein the historical information is considered in computing the filter replacement.
- 30. As per Claim 17, Hughes discloses wherein the first filter replacement date and the second filter replacement date define a first filter replacement interval and wherein a third filter replacement date and a forth replacement date define a second filter replacement interval, and wherein the first replacement interval is different from the second replacement interval (operational consistency— has no impact on method service).

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Claim Rejections - 35 USC § 103

31. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 32. <u>Claims 3, 10, and 18-20</u> are rejected under 35 U.S.C. 103 as being unpatentable over Hughes.
- 33. As per Claim 3, Hughes does not expressly show wherein the message date is the same as the filter date.
- 34. However these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. The customer notification system would be performed regardless of the when the message date was. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, *see In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).
- 35. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have sent the message on the same date as the filter date, because such data does not functionally relate to the steps in the method claimed and because the subjective interpretation of the data does not patentably distinguish the claimed invention.

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36. As per Claims 10 and 20, Hughes does not expressly show wherein the contact is a command to a fulfillment location to ship a replacement filter to the customer or a service technician dispatch.

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- 37. However these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. The customer notification system would be performed regardless of the contact type used. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, *see In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPO2d 1031 (Fed. Cir. 1994).
- 38. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the contact a command to a fulfillment location to ship a replacement filter to the customer or a service technician dispatch, because such data does not functionally relate to the steps in the method claimed and because the subjective interpretation of the data does not patentably distinguish the claimed invention.
- 39. As per Claims 18 and 19, Hughes does not expressly show wherein the system retains information related to customer equipment, a filter system brand, model number, filter replacement part number, and/or location of filter system.
- 40. However these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. The customer notification system would be performed regardless of what the system retained. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see In re

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Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); In re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

41. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have retained information related to customer equipment, a filter system brand, model number, filter replacement part number, and/or location of filter system in the system, because such data does not functionally relate to the steps in the method claimed and because the subjective interpretation of the data does not patentably distinguish the claimed invention.

Conclusion

- 42. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 43. The following U.S. patent are cited to further show the best domestically patented prior art found by the examiner:

U.S. Pat. No. 6,049,801 to Whitmyer, Jr.

Whitmyer discloses a system for registering reminders into a database and correlating provided services with the generation of the stored reminders.

44. Additional Literature has been referenced on the attached PTO-892 form, and the Examiner suggests the applicant review these documents before submitting any amendments.

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45. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Ouellette whose telephone number is (703) 605-0662. The examiner can normally be reached on Monday through Thursday, 8am -

5:00pm.

46. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on (703) 308-2702. The fax phone numbers for

the organization where this application or proceeding is assigned (703) 872-9306 for all

official communications.

47. Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 306-5484.

February 3, 2005

JOHN G. WEISS

SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3600

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